

# Formic Acid/Acetic Acid Pulping of Kash (*Saccharum Spontaneum*), Jute (*Chorcorus Capsularies*) and Dhaincha (*Sesbania Aculeata*)

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## ABSTRACT

The cooking of kash (*Saccharum spontaneum*), jute (*chorcorus capsularies*) and dhaincha (*Sesbania aculeata*) was carried out at atmospheric pressure using a mixture of formic acid/ acetic acid/ water. Increasing formic acid concentration in the acid mixture improved the delignification rate. The unbleached pulp yield was higher than the conventional pulping process. In order to make easier and chlorine free bleaching, it was possible to improve the delignification in an efficient and selective manner by using peroxyacid in acidic organic medium. Low kappa number and high viscosity of pulp were obtained by treating formic acid/ acetic acid/ water pulp with peroxyacid. Alkaline peroxide bleaching gave pulp of above 80 % brightness. The acceptable strength properties were obtained. Bleaching improved the strength properties.

**Keywords:** Acetic acid, Formic acid, Pulping, Peroxy acid, *Saccharum spontaneum*, jute (*chorcorus capsularies*) and dhaincha (*Sesbania aculeata*)